

**Specification  
for  
Replacement of Hot Water Boiler  
at  
Milwaukee Fire Department Engine House  
June 12, 2008**

I. General Scope of Work:

- A. Engine House # 39, located at 8025 N. Bradley Rd. Milwaukee, WI. Remove and dispose of one existing hot water boiler, and replace with new Burnham hot water unit.
- B. Contractor is required to install new unit and have the new unit operating to produce heat within one day of removal of the existing unit. If this requirement cannot be met, contractor shall be required to provide an alternate means for providing heat at this Engine House.
- C. Engine House Boiler Installation shall be completed within three (3) days of start date.
- D. Contractor shall furnish all mechanical labor, equipment and materials needed to complete this work.
- E. Contractor is responsible for all electrical wiring and final on-site connections and system statement.
- F. Contractor is responsible for the cost to obtain all required permits.
- G. Contractor is responsible for any and all asbestos removal and proper disposal. All personnel involved with asbestos abatement must be certified by the State of Wisconsin to perform such work and contractor should provide documentation with the bid to confirm certification.

**NOTE:** If not provided with the bid, but requested by the DOA, Business Operations Division, Procurement Services Section, the documents required to confirm proper certification must be furnished within three working days of receiving a request or the bid will be rejected.

- H. Because this Engine House will be occupied by Fire Fighting personnel during the time of performance of the work, it is imperative that all areas be kept free of dirt and debris. All openings will be closed and secured at the end of the vendor's

workday. Work shall be performed Monday through Saturday during the hours of 7:30 AM to 6:00 PM. Any hours of work that may be needed beyond these times will require advance authorization by the Milwaukee Fire Department.

II. Technical Requirements:

- A. Boiler shall be a Burnham MPC series. Boiler shall be sized for the current number and size of radiation devices, taking into account all window and door openings that have an effect on heat loss.
- B. Boiler shall have a high / low firing capability.
- C. Boiler shall be vented per International Fuel Code recommendations.
- D. Vendor shall install the boiler in accordance with manufacturer's recommendations.
- E. Vendor shall provide sufficient combustion air per manufacturer's specifications for all gas appliances.
- F. Vendor shall reconnect interlock to existing outside combustion air device.
- G. Vendor shall provide and install a water meter in the boiler feed line. Meter shall be capable of being read from a standing position.
- H. Vendor shall provide and install a two-stage indoor/ outdoor reset control that will control hi- fire and lo-fire burner operation and loop water temperature.
- I. Vendor shall rebuild 2 existing Dezurik 3 inch pump isolation valves.
- J. Vendor shall bleed all radiation devices at start up.
- K. Boiler pad shall be modified/updated to accommodate new boiler unit with level mounting surface
- L. Any gas line replacement must meet National fuel Code standards.
- M. All work related to the installation of the new boiler must meet applicable codes.

- N. New feed water components (back flow preventer, pressure reducing valve, associated piping and bypass circuitry) shall be provided and installed in accordance with all applicable codes.
  - O. All exposed heating pipes shall be insulated per applicable ASHRAE standards.
  - P. Upon boiler startup, vendor shall perform a boiler boiler-out using an 8-way chemical treatment. After initial startup the entire system shall be treated with a sufficient quantity of 8-way chemical treatment to treat the capacity of the Engine House.
  - Q. Because the boiler at the Engine House can run on backup generator power, it is imperative that the boiler controls and burner will reset themselves anytime there is a power outage and AC power is restored. Contractor shall conduct a test at the time of boiler startup to confirm that the boiler controls will reset themselves.
- III. Warranty: All labor and materials shall be warranted 100% for a period of one (1) year following date of acceptance at no cost to the City of Milwaukee including travel time to the job site and all applicable freight costs. The successful bidder shall be responsible for handling all warranty claims.
- IV. Installation:
- A. Vendor shall be responsible for determining all conditions affecting the work.
  - B. Vendor shall be responsible for any damage incurred to the building and other equipment as a result of its actions, acts of its employees and subcontractor(s).
  - C. Lists: Vendor shall furnish a list of names of all employees assigned to this project.
  - D. Check-in: All vendors' employees assigned to this project shall check in on a daily basis with the assigned representative of the Milwaukee Fire Department prior to commencing any work.
  - E. Eating, Smoking and Drinking: Vendor's personnel are not permitted to eat or drink in private offices or at employee's desks but shall be confined to designated areas. **Smoking is not permitted in any City building.** Any litter generated by vendor's personnel during breaks shall be cleaned up by them before they leave the area.

- F. Intoxicants and Disorderly Conduct: Vendor's personnel shall not be permitted to bring intoxicating beverages or illegal substances into the building or during the work shift. Prevention of drunkenness, practical jokes or any forms of loud or disorderly conduct shall be strictly policed and shall be the responsibility of the crew supervisor.
  - G. Use of Telephones: Office telephones shall not be used by the vendor's employees for personal calls. Supervisors may use the telephone for emergencies. Long distance calls shall not be permitted on the office telephone for business or any other reason. Such calls shall be made only on the public pay phones.
  - H. Off-Limits Areas: Vendor's personnel shall not be permitted in any area outside the work limits covered by the contract. Violation of this provision shall be cause for employee discharge from the work and/or termination of the contract.
  - I. Fire Prevention: Vendor shall enforce MFD fire prevention instructions in areas where welding, torch cutting and open flame heating are carried out.
  - J. Rubbish: Vendor shall, for itself and its subcontractor(s), at all times during the prosecution of work, keep the premises free from the accumulation of waste materials, rubbish and general debris.
  - K. Dust: Vendor shall take the necessary precautions to prevent dust from traveling to surrounding work areas.
  - L. Subcontractors: Vendor is responsible for instructing its subcontractor(s) of all applicable rules and regulations governing this installation.
- V. Brand Names:
- A. References: If an article has been identified in this specification by a "brand name" and model number, such reference is intended to be descriptive but not restrictive. It is for the sole purpose of indicating to the prospective bidders a description of the articles that will be satisfactory. Other items of equal quality will be considered.
  - B. Substitutions: Unless the bidder clearly indicates in the bid that he/she is offering a different article, the bid shall be considered as an offering of the brand name article(s) identified herein.
- VI. Proven Experience: Bids will only be accepted from vendors who can certify that they are experienced with or meet the requirements of this specification

and have a proven track record for the timely installation of hot water boilers. Under this provision, bidders should provide with the bid the names of three companies/organizations for which similar work was performed along with their address and the name of a person to contact.

**NOTE:** If not provided with the bid, but requested by the DOA, Business Operations Division, Procurement Services Section, the list of references must be furnished within three working days of receiving a request or the bid will be rejected.

REF: BOILER REPLACEMENT (06/12/08)